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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Michael Larsson

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09/16/2009

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EXAMINER

TREYGER, ILYA Y

ART UNIT

PAPER NUMBER

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MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,982	Applicant(s) LARSSON, MICHAEL	
	Examiner ILYA Y. TREYGER	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1, 3, 8, 11, 15 and 16 are amended.
2. Claims 12 and 13 are canceled.
3. Claims 1-11 and 14-16 are examined on the merits.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 11 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 4,536,180) in view of Williams (US 7,025,718).

8. In Re claims 1-3,6, 9 and 10, Johnson discloses a surgical suction instrument comprising:

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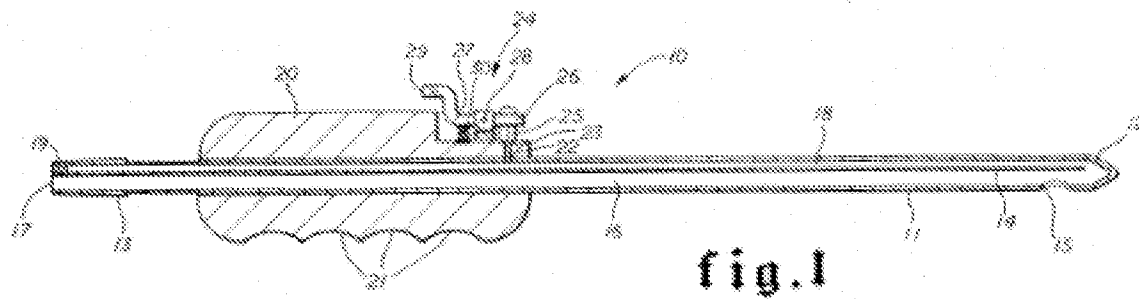
a catheter (Fig. 1) having a suction passage 16 (Fig. 1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);

a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14); and

since the source of vacuum is disclosed as being controllable (Col. 4, lines 30, 31), the controller for controlling pressure difference between a pressure in the drainage lumen and a pressure in the atmosphere is provided.

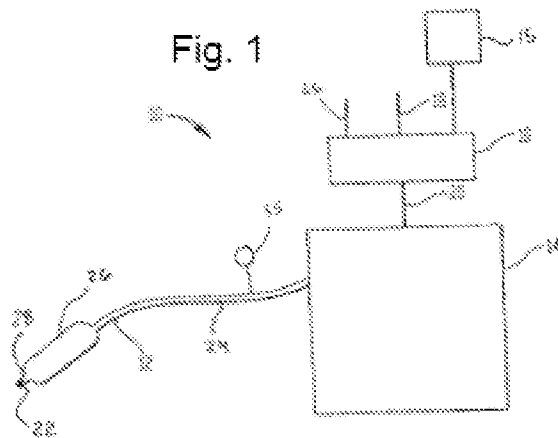


Johnson does not expressly disclose the apparatus comprising a pressure sensor for measuring the pressure in the lumen.

Williams teaches the catheter device (Abstract, lines 1-2) that is a pump system (claim 2) (Col. 5, lines 22-24) comprising a pressure sensor 55 (Col. 6, lines 26-28; Fig. 1) for measuring the pressure in the lumen 24 (Col. 5, line 42; Fig. 1) (claim 6) in communication with the programmable control logic module 16 (claim 3) (Col. 6, lines 34-39; Fig. 1), wherein, due to its programmable nature, the control logic module is fully capable of increasing the pressure

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continuously or/and abruptly (claims 9 and 10) and fully capable to open the lumen only when the pressure measured in the lumen corresponds to atmospheric pressure.



It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus of Johnson with the controlled pump system, as taught by Williams in order to employ the conventionally known way for measuring the pressure in the lumen.

In addition, the claim would have been obvious because the technique for improving a particular class of devices was part of the ordinary capabilities of a person of ordinary skill in the art, in view of the teaching of the technique for improvement in other situations.

9. In Re claim 4, Johnson discloses the invention discussed above, but does not expressly disclose the vent valve being operated automatically via controller.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the vent valve operable automatically via the controller, since it has been held that broadly providing a mechanical or automatic

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means to replace manual activity which has accomplished the same result involves only routine skill in the art.

10. In Re claim 5, Johnson discloses the surgical instrument (catheter) fully capable of increasing the negative pressure to achieve any pressure level allowed by the vacuum source (Col. 4, lines 29-31).

11. In Re claims 7 and 8, Johnson discloses the invention discussed above but does not expressly disclose the apparatus comprising two sensors for measuring the pressure in the lumen.

Williams teaches the catheter device (Abstract, lines 1-2) comprising a pressure sensors 22 (Col. 5, lines 49-50; Fig. 1) and 55 (Col. 6, lines 26-28; Fig. 1) for measuring the pressure in the lumen 24 (Col. 5, line 42; Fig. 1) (claim 6) in communication with the programmable control logic module 16 (claim 3) (Col. 6, lines 34-39; Fig. 1).

The rationale of obviousness rejection discussed above in claim 1 is incorporated herein in its entirety.

Johnson in view of Williams do not expressly disclose two sensors measuring the pressure in the different lumens.

Since Applicant did not state that the second sensor serves any specific purpose or performs any specific function other than the first sensor, i.e. measuring the pressure in the lumen, the location of the second sensor in the different lumen is the matter of mere rearranging of the essential working parts of the invention, and therefore it would have been obvious to those skilled in the art at the time the invention was made to locate the second sensor in the

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second lumen, since it has been held that rearranging parts of an invention involves only routine skill in the art.

12. In Re claims 11 and 15, since the apparatus of Johnson is disclosed for use of suction body material, Johnson discloses the method for operating an apparatus comprising:

a catheter (Fig. 1) having a suction passage 16 (Fig. 1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);

a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14).

Johnson does not expressly disclose the step of measuring the pressure in the desired lumen and increasing the pressure difference between a pressure in the lumen and a pressure in the atmosphere.

Williams teaches the method of measuring the pressure in lumen by the pressure sensor in communication with the programmable control logic module that, due to its programmable nature, is fully capable of increasing the pressure difference between a pressure in the lumen and a pressure in the atmosphere (Col. 5, lines 22-24; Col. 6, lines 26-28, lines 34-39; Fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Johnson with the steps of measuring the pressure in the desired lumen and increasing the pressure difference between a

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pressure in the lumen and a pressure in the atmosphere, as taught by Williams in order to employ the conventionally known way for measuring the pressure in the lumen.

13. In Re claim 14, Johnson discloses the method, wherein the auxiliary lumen is opened by opening a first valve (Col. 4, lines 15-28).

14. In Re claim 16, Johnson discloses the method for removing body material from a body cavity comprising the steps of:

providing a catheter comprising: a catheter (Fig. 1) having a suction passage 16 (Fig. 1), which is a drainage lumen (Col. 4, line 4) having a proximal end 12 (Fig. 1) in fluid communication with a venting passage 18 (Fig. 1), which is an auxiliary lumen (Col. 4, line 6);

the surgical instrument is disclosed for use of body material suction (Abstract, line 1) that reads on the collection container is present;

a source of suction (Col. 4, lines 29-31);

a valve apparatus 24 (Fig. 1) for opening the auxiliary lumen (Col. 4, lines 13, 14).

Johnson does not expressly disclose the step of measuring the pressure in the desired lumen and increasing the pressure difference between a pressure in the lumen and a pressure in the atmosphere.

Williams teaches the method of measuring the pressure in lumen by the pressure sensor in communication with the programmable control logic module that, due to its programmable nature, is fully capable of increasing the pressure difference between a pressure in the lumen and a pressure in the atmosphere (Col. 5, lines 22-24; Col. 6, lines 26-28, lines 34-39; Fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Johnson with the steps of of

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measuring the pressure in the desired lumen and increasing the pressure difference between a pressure in the lumen and a pressure in the atmosphere, as taught by Williams in order to employ the conventionally known way for measuring the pressure in the lumen.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILYA Y. TREYGER whose telephone number is (571)270-3217. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ilya Y Treyger/
Examiner, Art Unit 3761

/Tatyana Zalukaeva/
Supervisory Patent Examiner, Art Unit 3761